

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed as the invention is:

- 1.-20. *(Canceled)*
21. *(New)* A method for assessing the differentiation of a population of human embryonic stem cells, comprising measuring podocalyxin-like protein (PODXL) expression level in the population of human embryonic stem cells; wherein a decrease in that PODXL expression level relative to the PODXL expression level in the population measured at an earlier time point indicates that the population is differentiating.
22. *(New)* The method of claim 21, wherein the PODXL expression level is measured at the mRNA level.
23. *(New)* The method of claim 22, wherein the PODXL expression level is measured at the mRNA level by PCR amplification.
24. *(New)* The method of claim 21, wherein the PODXL expression level is measured at the protein level.
25. *(New)* The method of claim 24, wherein the PODXL expression level is measured at the protein level by antibody assay.
26. *(New)* The method of claim 21, wherein the PODXL expression level is measured using flow cytometry.